

# **EXHIBIT A**

**THERMO FINNIGAN LLC v. APPLERA CORPORATION**  
**CIVIL ACTION NO. 04-1505-GMS (D. DEL.)**

**JOINT CLAIM CONSTRUCTION CHART**

U.S. Patent No. 5,385,654 Claim Term	Claims at Issue	THERMO		APPLERA	
		CONSTRUCTION	INTRINSIC EVIDENCE	CONSTRUCTION	INTRINSIC EVIDENCE
anions	11	Negatively charged ions.	'654 patent: 1:1-2, 1:7-9, 2:25-26, 4:31-35.  Prosecution history: Amendment, 1/17/94, p. 4.	Low molecular weight monomeric negatively charged ions.	'654 patent: 1: 18-22, 1: 38-49; 2: 16-20, 2: 24-25, 2: 57- 62, 3: 5-15, 3: 41-53; 4: 31-34; 5: 22-32, 5: 44- 66; 6: 8-11, 6: 29-31, 6: 47-54, 7: 11-15, 7: 47- 52; 8: 17-21, 8: 40-45  Kelly, August 1992, Research Disclosure August 10, 1993, "Separation of Organic Acids using Phthalate for Indirect UV Detection."
capillary electrophoresis	11	Electrophoresis, or the movement of ions under the influence of an electric field, that takes place in a capillary tube.	'654 patent: 1:18-22, 1:13-2:20.	A chemistry technique which utilizes the differences in solute electrophoretic velocity to isolate the various components of a sample	'654 patent: 1: 13-23, 1: 50-65  Weinberger '382 patent (incorporated by reference):

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				in a capillary.	1: 12-15, 1: 42-46  Morin et al., Fresenius J. Anal. Chem. (1992) 342: 357 – 362, p. 357- 358.
capillary	11	A tube with a very small internal diameter.	'654 patent: 1:23-25, 4:45-51.	Agreed.	'654 patent: 1: 23-25, 4: 48-51, 6: 64-67, 7: 58-61, 8: 25- 27
carrier electrolyte	11	An electrically conductive fluid medium that carries or transports ions.	'654 patent: 1:25-27, 2:29-32, 2:56- 57.  Prosecution history: Amendment, 1/17/94, p. 4.	Any electrically conductive fluid medium.	'654 patent: 2: 56-57  Jones, '506 patent: 1: 18-23
target temperature	11	A selected temperature.	'654 patent: 3:21-32, 6:14-16.  Prosecution history: Amendment, 1/17/94, p. 5, 6.	A preselcted temperature of the fluid in the capillary prior to introducing the sample into the capillary and applying an electrical current to the capillary.	'654 patent: Abstract: 4-5, 2: 26-29, 2: 36-46, 3: 21-32, 5: 7- 14, 6: 3-5, 6: 17-19, 7: 22-24  '654 prosecution history:

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					Amendment dated January 17, 1994, paper no. 4, p. 6, 2 <sup>nd</sup> paragraph.  Morin et al., Fresenius J. Anal. Chem. (1992) 342: 357 – 362, p. 362.
detecting said anions by simultaneously monitoring said sample at two different wavelengths	11	Detecting the anions by monitoring the sample at two different wavelengths at the same time.	'654 patent: 3:41-44, 7:24-26.  Prosecution history: Amendment, 1/17/94, p. 7.	Detecting the anions in the sample by simultaneously monitoring the absorption of two different wavelengths of light, one of which is not absorbed by the anions.	'654 patent: 1: 45-49, 2: 48-51, 2: 57-62, 3: 41-53 4: 35-43, 4: 65-68, 5: 15-17, 5: 44-50, 6: 26-43, 7: 24-40, Figs 1A-E  Weinberger '382 patent (incorporated by reference): 2: 50-64, 9: 19 – 11: 26, 14: 11-47  '654 prosecution history: Amendment dated January 17, 1994, paper no. 4, p. 6, 2 <sup>nd</sup> and 3 <sup>rd</sup> paragraphs and

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					<p>carryover to p. 7.</p> <p>Notice of Allowability dated July 14, 1994, paper no. 9, pp. 3-4.</p> <p>Foret et al. J. Chrom. (1989) 470: 299-308, pp. 299, 300</p> <p>Kelly and Burgi, August 1992, Research Disclosure 34016, "Separation of Small anions using Dichromate for Indirect UV Detection."</p> <p>Kelly and Nelson, J. Chrom (1993) 16: 2103-2122, copy of submitted paper.</p> <p>Jones, '506 patent: 3: 12-22, 4: 34-36, 5: 62-64</p>

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maintaining the temperature in said capillary to within +/-0.5°C of said target temperature	11	Maintaining the temperature in the capillary to within +/- 0.5°C of the target temperature.	'654 patent: 3:23-25, 3:65-4:1, 4:59-62, 6:17-19.	Maintaining the temperature throughout the fluid in the capillary to within +/- 0.5°C of the target temperature by monitoring electrical resistance in the capillary and maintaining the resistance at a constant level.	'654 patent: Abstract: 3-5, 2: 26-30, 2: 40-47, 3: 21-26, 4: 59-62, 5: 1-14, 6: 3-5, 6: 17-19, 7: 22-24 Weinberger '382 patent (incorporated by reference): 8: 4-9, 11: 29 – 12: 34 Kurosu et al. J. High Res. Chrom. (1991) 14: 200-203, pp. 201-202.
electroosmotic flow	15	Flow in a capillary under the influence of an electric field.	'654 patent: 2:63-67, 5:33-43.	The bulk flow of liquid due to the effect of an electric field on cations adjacent to anionic groups immobilized on the capillary wall.	Weinberger '382 patent (incorporated by reference): 1: 27-32, 3: 50-65
electroosmotic flow modifier	15	Substance that modifies the electroosmotic flow.	'654 patent: 2:63-67, 5:33-43.	A small cationic molecule that neutralizes the charge on the capillary wall.	'654 patent: 2: 13-15, 2: 63 – 3: 4, 5: 33-44, 5: 51-53, 6: 48-49, 7: 1-9, 7: 47-52, 8: 10-17, 8: 35-36

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					<p>Morin et al., Fresenius J. Anal Chem. (1992) 342: 357 – 362, p. 359.</p> <p>Kelly, Research Disclosure August 10, 1993, “Separation of Organic Acids using Phthalate for Indirect UV Detection.”</p> <p>Kelly and Burgi, August 1992, Research Disclosure 34016, “Separation of Small Anions using Dichromate for Indirect UV Detection.”</p> <p>Kelly and Nelson, J. Chrom. (1993) 16: 2103-2122, copy of submitted paper.</p> <p>Jones, ’506 patent: 3: 61 – 4: 8</p>